

Navy Personnel Research and Development Center

San Diego, California 92152-6800

TN-92-4

December 1991



2

AD-A243 680



DTIC
ELECTRONIC
DEC 1991
S C D

Population Statistics: Navy Parents and Children

Marie D. Thomas
Patricia J. Thomas

91-18855



Approved for public release: distribution is unlimited.

December 1991

**Population Statistics:
Navy Parents and Children**



Marie D. Thomas
Patricia J. Thomas

Reviewed by
Jules I. Borack

Approved and released by
Richard C. Sorenson
Technical Director (Acting)

Accession For	
NTIS (Grant)	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Approved for public release;
distribution is unlimited.

Navy Personnel Research and Development Center
San Diego, California 92152-6800

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 1991		3. REPORT TYPE AND DATE COVERED Tech. Note Apr-Sep 1991
4. TITLE AND SUBTITLE Population Statistics: Navy Parents and Children			5. FUNDING NUMBERS N0002291WRA5163	
6. AUTHOR(S) Marie D. Thomas, Patricia J. Thomas				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Navy Personnel Research and Development Center San Diego, California 92152-6800			8. PERFORMING ORGANIZATION REPORT NUMBER NPRDC-TN-92-4	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Chief of Naval Personnel (Pers-65) Washington, DC 20370			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES This Report was prepared for the Child Development Services Branch of the Bureau of Naval Personnel by the Navy Personnel Research and Development Center, San Diego, CA 92152-6800.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Navy Personnel Research and Development Center was tasked by the Child Services Branch of the Bureau of Naval Personnel (PERS-659) to develop estimates of the numbers of Navy parents and Navy children. These estimates are provided in tables for officers and enlisted separately, and reflect marital status of parents and age of children. The primary data source for officers was the 1990 Navy Personnel Survey. Most enlisted data were derived from the 1990 Survey of Navy Women and Survey of Navy Men. The most recently available Enlisted Master Record Extract and Officer History Tapes were utilized as sources of data for Navy-wide demographics.				
14. SUBJECT TERMS Navy parents, Navy children, child-care			15. NUMBER OF PAGES 40	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

FOREWORD

The Child Development Services Branch of the Bureau of Naval Personnel (PERS-659) requires information on dependent children of Navy personnel for use in planning Navy-sponsored child-care and youth programs. As a consequence, this office tasked the Navy Personnel Research and Development Center (work request N0002291WRA5163), in May 1991, to develop estimates of the numbers of Navy parents and Navy children. The estimates were to be provided in the form of tables, developed for officers and enlisted personnel separately, that would reflect marital status of parents and age of children. This technical note responds to that requirement.

RICHARD C. SORENSON
Technical Director (Acting)

CONTENTS

	Page
INTRODUCTION	1
Background.....	1
METHOD	1
Survey Instruments and Samples.....	1
Survey of Navy Women and Navy Men (SNW/NM).....	1
Navy Personnel Survey (NPS)	1
Personnel Data Tapes.....	2
Procedure.....	2
RESULTS.....	3
DISCUSSION	4
APPENDIX A--SAMPLING ERRORS AND CONFIDENCE LIMITS FOR NUMBER OF PARENTS BY MARITAL STATUS	A-0
APPENDIX B--OFFICER TABLES	B-0
APPENDIX C--ENLISTED TABLES.....	C-0
DISTRIBUTION LIST	

INTRODUCTION

Background

The Child Development Services Branch of the Bureau of Naval Personnel (PERS-659) requires information on dependent children of Navy personnel for use in planning Navy-sponsored child-care and youth programs. As a consequence, this office tasked the Navy Personnel Research and Development Center, in May 1991, to develop estimates of the numbers of Navy parents and Navy children. The estimates were to be provided in the form of tables, developed for officers and enlisted personnel separately, that would reflect marital status of parents and age of children. This technical note responds to that requirement.

METHOD

Several data sets were used to develop the estimates. For officers, the primary data source was the 1990 Navy Personnel Survey. Most enlisted data were derived from the Survey of Navy Women and Survey of Navy Men, also conducted in 1990. The most recently available Enlisted Master Record and Officer History Tapes were utilized as sources of data for Navy-wide demographics.

Survey Instruments and Samples

Survey of Navy Women and Navy Men (SNW/NM)

One of the major purposes of the 1990 SNW/NM was to verify rates of single parenthood and pregnancy that had been established for enlisted personnel through a similar survey conducted in 1988. In addition, the 1990 version gathered data regarding dependent children by age group.

Samples of enlisted men ($N = 3,820$) and enlisted women ($N = 2,783$) were sent surveys during May and June 1990. Since the survey topics were gender-relevant, the samples were stratified on paygrade and rating group for each gender separately. Only E-2 through E-9 personnel were included in the survey effort because of the mobility and low level of response that is typically obtained with E-1 personnel. The response rate for the survey was 61 percent after removing the 472 surveys returned as nondeliverable.

The sample of enlisted personnel on which the analyses were based consisted of 2,095 men and 1,656 women. Forty-one percent of the men and 34 percent of the women were parents.

Navy Personnel Survey (NPS)

Because the SNW/NM was administered only to enlisted personnel, another data source had to be found that contained information on dependent children and marital status of officers. The 1990 version of NPS, an annual survey of a representative sample of Navy personnel, included some items in the demographic section that proved to be useful. In addition, the survey contained several items on child care arrangements.

NPS was mailed during the first 2 weeks of October 1990. The survey was sent to a random sample of 22,710 Navy personnel, approximately 8,000 of whom were officers. A total of 11,809 questionnaires were completed and returned, yielding a 52 percent return rate. The responses of officers to NPS, but not of enlisted personnel,¹ were used to develop the tables that appear in this report.

Within the officer sample, 4,007 were men and 589 were women. Sixty-eight percent of the male officers were parents as were 47 percent of the female officers.

Personnel Data Tapes

The Officer History Tape for December 1990 was used to obtain the actual number of active duty officer personnel in the Navy. The number at that time was 74,246, which includes Warrant and Chief Warrant Officers and personnel in ranks above O-6. The population from which the NPS sample was drawn had a total of 71,400 officers in ranks O-1 to O-6.

The Enlisted Master Record Extract for March 1991 was utilized to obtain corresponding figures for enlisted personnel. The enlisted strength at that time was 532,411, which includes E-1s and personnel called up for Operation Desert Storm. Total enlisted strength was lower in March 1990 when the SNW/NM sample was developed. The *N* for E-2s to E-9s at that time was approximately 480,450. Since the estimates contained in the Enlisted tables do not include E-1s and were based on the lower number of enlisted personnel from the March 1990 records, they will somewhat underestimate current child care needs.

Procedure

Estimates of the number of personnel and children by specific categories were requested by Child Development Services (PERS-659). Parents had to be categorized into five groups: single parents, dual military parents, parents with spouse working full-time, parents with spouse working part-time, and parents with spouse at home. Children's ages were to be grouped into the ranges of 0 to 5, 6 to 12, 13 to 15, 16 to 18, and 19 to 20. However, only dependents of enlisted personnel could be analyzed in this manner. NPS, from which officer data were taken, had grouped response options (SNW/NM asked for actual ages of all children) and older children were grouped into a category labeled 16 through 20 years. In addition to marital status of parent and age of child, the tasking included analyses by type of housing (Navy versus civilian), estimates of current child care arrangements, and demographic information for all Navy personnel (gender, age, and rank/paygrade).

Because men and women in the Navy are known to be distributed very differently on rank/paygrade and marital status (Thomas & Edwards, 1990),² all analyses initially were conducted for each gender separately. The percentages of the samples that fell into each of the categories were multiplied by the actual number of personnel within that rank/paygrade in the Navy to develop

¹NPS had insufficient enlisted women of certain paygrades to develop reliable estimates of children by age group; whereas, SNW had over sampled women in groups known to be very small.

²Thomas, P. J., & Edwards, J. E. (1989). *Incidence of pregnancy and single parenthood among enlisted personnel in the Navy* (NPRDC-TR-90-1). San Diego: Navy Personnel Research and Development Center.

gender-specific estimates. Only then were the statistics combined to create Navy- wide estimates, which were rounded to the nearest 50. This post hoc weighting system also served to correct for differential survey nonresponse patterns by gender and rank/paygrade and for over sampling by SNW/NM of certain small groups.

Determining the number of children required extrapolating from the number of parents with children in various age groups. If no one in the survey sample fell within a specific category (i.e., E-4 single parent with a child in the 16 to 18 year-old range), no estimate could be developed for the Navy population.

Determining the number of children of military-married-to-military parents required a decision rule. For several reasons, in addition to sampling error, the number of children of female and male dual military parents at a specified rank/paygrade was not equal. Women tend to marry men who are older than they are, so the rank/paygrade of the male parent would be expected to be higher than that of the female parent. Dual military marriages do not always involve two Navy personnel, so only one member of a cross-service couple could be in the sample. Knowing these facts, it was decided that the best estimate that could be derived from the available survey data would require dividing by 2 the sum of the children of male and female parents (by rank/paygrade) in dual military marriages. The reader is cautioned that the resulting figures are probably underestimates.

The child care questions from NPS permitted multiple answers. As a consequence, *percentage* of respondents choosing specific response options are presented in the tables, rather than *number*, and these percentages may add to more than 100. The data were not weighted by gender and rank/paygrade.

For the officer and enlisted data, sampling errors were computed for number of parents for each marital status. All sampling errors were less than 1 percent. However, when large populations are considered, small sampling errors may result in estimates that cover a wide range of possible values. Appendix A lists the sampling errors and the values representing the 95 percent confidence interval for the number of parents of each marital status. That is, there is a 95 percent chance that the true number of parents falls within the listed limits.

RESULTS

Tables are presented for officers in Appendix B; the same tables are then presented for enlisted personnel in Appendix C. Listed below are the table topics and numbers.

Estimated number of parents based on age of youngest child

Tables B-1, C-1: Number of parents by marital status of parent

Tables B-2, C-2: Number of parents by rank/paygrade of parent

Estimated number of children by age of child and rank/paygrade of parent

Tables B-3, C-3: Total number of children

Tables B-4, C-4: Number of children of dual military parents

Tables B-5, C-5: Number of children of single parents with custody

Tables B-6, C-6: Number of children of navy personnel with civilian spouse

Tables B-7, C-7: Number of children of navy personnel with civilian spouse employed full-time

Tables B-8, C-8: Number of children of navy personnel with civilian spouse employed part-time

Other "Number of Children" Tables

Tables B-9, C-9: Number of children age 0 to 5 by marital status and rank/paygrade of parents

Tables B-10, C-10: Number of children age 3 to 5 (and 3 to 4 for enlisted) for personnel with spouses at home or working part-time by rank/paygrade

Tables B-11, C-11: Number of children living in Navy housing by age of children and rank/paygrade of parents

Tables B-12, C-12: Number of children living in civilian housing by age of children and rank/paygrade of parents

Number of Active Duty Personnel by Rank/Paygrade and Age Group

Tables B-13, C-13: Total number of males

Tables B-14, C-14: Total number of single males

Tables B-15, C-15: Total number of married males

Tables B-16, C-16: Total number of females

Tables B-17, C-17: Total number of single females

Tables B-18, C-18: Total number of married females

Child-care

Tables B-19, C-19: For children age 0 to 5: who usually takes care of children by parent's marital status

Tables B-20, C-20: For children age 6 to 12: who usually takes care of children by parent's marital status

Tables B-21, C-21: Why parents who require full-time care for preschool child do not use military-based child care, by marital status of parents

Tables B-22, C-22: Percent of parents requiring before and after school care by marital status of parents

DISCUSSION

The estimates presented in this report are based on responses to items taken from two separate surveys that were administered within a few months of each other in 1990. These questions were not designed to meet the needs of Child Development Services and, as a consequence, were not worded optimally for that purpose. In addition, the survey samples did not contain a sufficient number of respondents in certain categories to provide information on relatively small groups.

Since Child Development Services has a continuing need for current information on dependent children, they should make their requirements known prior to development of the next iteration of the SNW/NM, scheduled for Spring 1992. Marital/parental status and number of children are

variables being tracked with the SNW/NM and, for the first time, officers will be included in the 1992 sample. Because the sampling design includes stratification on paygrade within gender, it would be possible to over sample groups that are known to be relatively small so that more accurate estimates than appear in this report can be developed. In addition, special questions could be designed to meet informational needs. Until Navy automated records are capable of deriving the data that are needed for administration of child care and youth programs, a survey approach probably will be the most cost-effective means of obtaining the information.

APPENDIX A

**SAMPLING ERRORS AND CONFIDENCE LIMITS FOR
NUMBER OF PARENTS BY MARITAL STATUS**

Table A-1
Sampling Errors and Confidence Limits for Number of
Parents by Marital Status

Marital Status	Estimated Number	Sampling Error (%)	95 Percent Confidence
Officers (Total N = 71,400)			
Single parent	1,050	.176	800-1,300
Dual military	2,300	.248	1,950-2,650
Spouse works full-time	9,650	.498	8,950-10,350
Spouse works part-time	6,850	.428	6,250-7,450
Spouse at home	17,150	.612	16,300-18,000
Enlisted (Total N = 480,450)			
Single parent	15,050	.266	12,550-17,550
Dual military	12,000	.206	10,050-13,950
Spouse works full-time	55,800	.485	51,250-60,350
Spouse works part-time	35,950	.415	32,050-39,850
Spouse at home	76,100	.566	70,800-81,400

APPENDIX B
OFFICER TABLES

Table B-1**Estimated Number of Parents by Age of Youngest Child and Marital Status of Parent**

Marital Status	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
Single parent	350	450	100	150	1,050
Dual military	1,600	400	150	150	2,300
Spouse works full-time	3,200	3,450	1,500	1,500	9,650
Spouse works part-time	3,350	2,400	650	450	6,850
Spouse at home	11,600	3,950	800	800	17,150
Total	20,100	10,650	3,200	3,050	37,000

Notes.

1. Estimates for all tables are based on the 1990 NPS survey sample unless otherwise indicated. Survey data were weighted by rank and gender to arrive at Navy estimates.
2. All estimates are rounded to the nearest 50.

Table B-2**Estimated Number of Parents by Age of Youngest Child and Rank of Parent**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	2,400	750	100	50	3,300
O-2	1,900	550	100	50	2,600
O-3	8,200	2,750	650	500	12,100
O-4	5,500	3,250	750	700	10,200
O-5	1,800	2,700	1,000	700	6,200
O-6	300	650	600	1,050	2,600
Total	20,100	10,650	3,200	3,050	37,000

Table B-3

**Estimated Number of Children in Navy by
Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	3,300	2,200	500	200	6,200
O-2	2,550	1,650	300	300	4,800
O-3	11,550	7,250	2,050	1,750	22,600
O-4	7,550	8,200	2,100	2,100	19,950
O-5	2,250	5,800	2,550	2,500	13,100
O-6	350	900	950	2,400	4,600
Total	27,550	26,000	8,450	9,250	71,250

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within rank and dividing by 2. This yields a number that is probably an underestimate.

Table B-4

**Estimated Number of Children of Dual Military Parents
by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	100	a	b	b	100
O-2	50	50	b	a	100
O-3	400	200	50	100	750
O-4	350	300	50	50	750
O-5	200	100	a	a	300
O-6	50	a	a	50	100
Total	1,150	650	100	200	2,100

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within rank and dividing by 2. This yields a number that is probably an underestimate.

^aThere were less than 26 children in this cell.

^bNo one in the survey sample at this rank had a child of this age; therefore, the number in the Navy could not be estimated.

Table B-5

**Estimated Number of Children of Single Parents with Custody
by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	50	a	b	b	50
O-2	50	50	b	b	100
O-3	150	350	100	100	700
O-4	100	250	100	150	600
O-5	50	100	a	50	200
O-6	a	a	b	50	50
Total	400	750	200	300	1,700

^aThere were less than 26 children in this cell.

^bNo one in the survey sample at this rank had a child of this age; therefore, the number in the Navy could not be estimated.

Table B-6

**Estimated Number of Children in Families with a Civilian Spouse
by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	3,150	2,200	500	200	6,050
O-2	2,450	1,550	300	300	4,600
O-3	11,000	6,700	1,900	1,550	21,150
O-4	7,100	7,650	1,950	1,900	18,600
O-5	2,000	5,600	2,550	2,450	12,600
O-6	300	900	950	2,300	4,450
Total	26,000	24,600	8,150	8,700	67,450

Table B-7

**Estimated Number of Children in Families with a Civilian Spouse
Employed Full-time by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	400	750	150	50	1,350
O-2	500	700	150	200	1,550
O-3	1,950	1,650	750	800	5,150
O-4	850	1,900	900	1,200	4,850
O-5	300	1,250	850	950	3,350
O-6	50	200	300	850	1,400
Total	4,050	6,450	3,100	4,050	17,650

Table B-8

**Estimated Number of Children in Families with a Civilian Spouse
Employed Part-time by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	600	350	200	*	1,150
O-2	350	200	50	*	600
O-3	1,850	1,700	450	300	4,300
O-4	1,400	1,850	400	300	3,950
O-5	450	1,450	700	550	3,150
O-6	50	150	250	600	1,050
Total	4,700	5,700	2,050	1,750	14,200

*No one in the survey sample at this rank had a child of this age; therefore, the number in the Navy could not be estimated.

Table B-9**Number of Children Age 0 to 5 by Marital Status and Rank of Parents**

Rank	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home	Total
O-1	50	100	400	600	2,150	3,300
O-2	50	50	500	350	1,600	2,550
O-3	150	400	1,950	1,850	7,200	11,550
O-4	100	350	850	1,400	4,850	7,550
O-5	50	200	300	450	1,250	2,250
O-6	^a	50	50	50	200	350
Total	400	1,150	4,050	4,700	17,250	27,550

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within rank and dividing by 2. This yields a number that is probably an underestimate.

^aThere were less than 26 children in this cell.

Table B-10**Number of Children Ages 3 to 5 by Marital Status and Rank of Parents**

Rank	Spouse Works Part-time	Spouse at Home
O-1	250	950
O-2	50	650
O-3	800	2,800
O-4	800	2,400
O-5	300	700
O-6	50	150
Total	2,250	7,650

Note. Computations for ages 3 to 4 could not be carried out for officers due to the manner in which the NPS data were gathered.

Table B-11**Number of Children Who Live in Navy Housing by
Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	1,150	600	200	100	2,050
O-2	1,050	650	200	150	2,050
O-3	4,150	2,950	850	650	8,600
O-4	2,050	2,400	550	500	5,500
O-5	350	1,250	350	400	2,350
O-6	100	250	350	750	1,450
Total	8,850	8,100	2,500	2,550	22,000

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within rank and dividing by 2. This yields a number that is probably an underestimate.

Table B-12**Number of Children Who Live in Civilian Housing
by Age of Children and Rank of Parents**

Rank	Years 0-5	Years 6-12	Years 13-15	Years 16+	Total
O-1	2,150	1,600	300	100	4,150
O-2	1,500	1,000	100	150	2,750
O-3	7,400	4,300	1,200	1,100	14,000
O-4	5,500	5,800	1,550	1,600	14,450
O-5	1,900	4,550	2,200	2,100	10,750
O-6	250	650	600	1,650	3,150
Total	18,700	17,900	5,950	6,700	49,250

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within rank and dividing by 2. This yields a number that is probably an underestimate.

Table B-13

**Male Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	--	262	1,952	516	2,730
O-1	5,324	2,656	194	4	8,178
O-2	1,930	6,544	460	6	8,940
O-3	11	16,727	5,084	214	22,036
O-4	--	3,344	8,413	761	12,518
O-5	--	3	6,051	1,540	7,594
O-6	--	--	751	3,115	3,866
Above O-6	--	--	1	256	257
Total	7,265	29,536	22,906	6,412	66,119

Note. 822 male officer records did not have information about marital status. Therefore, the entries in Tables D2 and D3 do not always total to the corresponding entries in this table.

^aFrom December 1990 Officer History Tape.

Table B-14

**Single Male Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	--	15	142	40	197
O-1	4,349	1,175	16	--	5,540
O-2	1,332	3,272	46	1	4,651
O-3	8	5,413	594	68	6,083
O-4	--	452	913	90	1,455
O-5	--	--	406	185	591
O-6	--	--	45	208	253
Above O-6	--	--	--	7	7
Total	5,689	10,327	2,162	599	18,777

^aFrom December 1990 Officer History Tape.

Table B-15

**Married Male Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	--	234	1,761	468	2,463
O-1	907	1,425	169	4	2,505
O-2	594	3,246	401	5	4,246
O-3	3	11,197	4,411	144	15,755
O-4	--	2,839	7,344	666	10,849
O-5	--	--3	5,495	1,323	6,821
O-6	--	--	693	2,878	3,571
Above O-6	--	--	1	249	250
Total	1,504	18,944	20,275	5,737	46,460

^aFrom December 1990 Officer History Tape.

Table B-16

**Female Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	1	20	39	1	61
O-1	679	444	40	1	1,164
O-2	215	763	92	6	1,076
O-3	--	2,296	864	15	3,175
O-4	--	479	1,274	44	1,797
O-5	--	2	523	78	603
O-6	--	--	36	89	125
Above O-6	--	--	--	2	2
Total	895	4,004	2,868	236	8,003

Note. 313 female officer records did not have information on marital status. Therefore, the entries in tables D5 and D6 do not always total to the corresponding entry in this table.

^aFrom December 1990 Officer History Tape.

Table B-17

**Single Female Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	--	11	13	--	24
O-1	572	302	21	1	896
O-2	160	499	47	2	708
O-3	--	1,181	414	10	1,605
O-4	--	185	553	23	761
O-5	--	--	211	42	253
O-6	--	--	19	63	82
Above O-6	--	--	--	1	1
Total	732	2,178	1,278	142	4,330

^aFrom December 1990 Officer History Tape.

Table B-18

**Married Female Officers:
Number of Active Duty Personnel^a by Rank and Age Group**

Rank	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
WO	--	5	25	--	30
O-1	102	118	16	--	236
O-2	54	239	37	3	333
O-3	--	1,052	402	4	1,458
O-4	--	258	666	21	945
O-5	--	2	284	32	318
O-6	--	--	14	25	39
Above O-6	--	--	--	1	1
Total	156	1,674	1,444	86	3,360

^aFrom December 1990 Officer History Tape.

Table B-19

**Percentage of Officers Reporting Who Usually Takes Care of Their Children
by Marital Status of Parent for Children Age 0 to 5**

Caretaker	Single Parent	Dual Military	Works Full-time	Spouse Works Part-time	Spouse at Home
Military child care center	11	19	10	15	18
Base-operated family home care program	19	3	4	6	5
Private licensed facility	34	35	49	32	18
24-hour facility	<1	<1	1	<1	<1
At-home employee	13	35	21	14	6
Relative	31	11	11	10	8
Friend	22	15	11	31	30
Older sibling	6	1	1	2	3
Spouse	5	14	11	37	60
Other	11	8	9	10	9
No arrangements/child- care problem	<1	2	2	4	2

Notes.

1. $N = 661$.
2. Columns and rows do not add to 100 because survey respondents could choose more than one option.

Table B-20**Percentage of Officers Reporting Who Usually Takes Care of Their Children
by Marital Status of Parent for Children Age 6 to 12**

Caretaker	Single Parent	Dual Military	Works Full-time	Spouse Works Part-time	Spouse at Home
Military child care center	5	14	8	10	13
Base-operated family home care program	16	2	3	3	4
Private licensed facility	30	33	50	30	19
At-home employee	5	30	12	15	6
Relative	21	20	15	8	12
Friend	42	25	34	36	36
Older sibling	10	5	15	13	9
Spouse	<1	22	15	35	57
Other	25	18	6	9	12
No arrangements/child- care problem	7	5	1	3	3

Notes

1. $N = 349$.
2. Columns and rows do not add to 100 because survey respondents could choose more than one option.

Table B-21

**Percentage of Officers Requiring Full-time Care for a Preschool Child
Reporting Why They Do Not Use Military Child Development Centers or
Family Home Care, by Marital Status of Parent**

Reason for not using military child care	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home	Total
Service unavailable/ not aware of service	33	8	14	21	13	15
Waiting list	25	20	25	25	37	28
Inconvenient location		12	27	20	21	20
Substandard care	21	16	17	10	8	13
Restricted hours		19	5	2	3	5
Too expensive		1	1		3	2
Other	21	24	11	22	15	17

Notes:

1. N = 380.
2. Only one response could be chosen; therefore, column percentages add to 100.
3. A single question assessed reasons for not using both military child development centers and family home care. Child development centers were not assessed separately.

Table B-22

**Percentage of Officers Who Require Before and After
School Care by Marital Status of Parent**

Type of care	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home
Before school	41	33	29	10	11
After school	59	39	51	42	26

Notes:

1. N = 1,383.
2. Respondents could choose more than one type of care.
3. Reasons for not needing care were not assessed.

APPENDIX C
ENLISTED TABLES

Table C-1**Estimated Number of Parents by Age of Youngest Child and Marital Status of Parent**

Marital Status	0-5	6-12	13-15	16-18	19+	Total
Single parent	7,000	5,400	1,250	900	500	15,050
Dual military	10,100	1,350	500	50	^a	12,000
Spouse works full-time	30,450	17,850	3,900	2,450	1,150	55,800
Spouse works part-time	20,750	11,100	2,050	1,800	250	35,950
Spouse at home	61,900	11,300	1,350	1,300	250	76,100
Total	130,200	47,000	9,050	6,500	2,150	194,900

Notes.

1. Estimates for all tables are based on the 1990 SNW/NM sample unless otherwise indicated. Survey data were weighted by paygrade and gender to arrive at Navy estimates.
2. All estimates are rounded to the nearest 50.

^aThere were less than 26 children in this cell.

Table C-2**Estimated Number of Parents by Age of Youngest Child and Paygrade of Parent**

Paygrade	0-5	6-12	13-15	16-18	19+	Total
E-2	3,900	450	^a	^a	^a	4,350
E-3	7,850	100	400	^a	^a	8,350
E-4	25,500	2,500	400	350	350	29,100
E-5	44,550	7,900	1,050	100	^a	53,600
E-6	33,050	18,550	3,300	3,150	850	58,900
E-7	12,000	12,850	1,850	1,400	550	28,650
E-8	2,800	3,400	1,100	800	200	8,300
E-9	550	1,250	950	700	200	3,650
Total	130,200	47,000	9,050	6,500	2,150	194,900

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-3**Estimated Number of Children in Navy by
Age of Children and Paygrade of Parents**

Paygrade	0 -5	6-12	13-15	16-18	19+	Total
E-2	4,200	1,100	^a	^a	^a	5,300
E-3	10,100	1,000	400	^a	^a	11,500
E-4	31,600	7,400	1,000	750	400	41,150
E-5	59,600	27,550	3,450	850	50	91,500
E-6	42,450	44,550	10,300	7,450	1,150	105,900
E-7	14,250	30,050	6,950	5,250	1,250	57,750
E-8	2,950	5,850	2,650	2,300	400	14,150
E-9	800	2,750	2,500	2,700	800	9,550
Total	165,950	120,250	27,250	19,300	4,050	336,800

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within paygrade and dividing by 2. This yields a number that is probably an underestimate.

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-4**Estimated Number of Children of Dual Military Parents by
Age of Children and Paygrade of Parents**

Paygrade	0 -5	6-12	13-15	16-18	19+	Total
E-2	100	^a	^a	^a	^a	100
E-3	200	^a	^a	^a	^a	200
E-4	2,100	100	200	^a	^a	2,400
E-5	2,400	350	^a	50	^a	2,800
E-6	1,500	1,300	100	50	^b	2,950
E-7	250	200	100	^b	^a	550
E-8	50	50	^b	^b	^b	100
E-9	^b	^b	^b	^a	^b	(50)
Total	6,600	2,000	400	100	(50)	9,150

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within paygrade and dividing by 2. This yields a number that is probably an underestimate.

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

^bThere were less than 26 children in this cell.

Table C-5

**Estimated Number of Children of Single Parents with Custody by
Age of Children and Paygrade of Parents**

Paygrade	0 -5	6 -12	13-15	16-18	19+	Total
E-2	200	750	^a	^a	^a	950
E-3	1,200	150	^a	^a	^a	1,350
E-4	1,450	650	400	400	50	2,950
E-5	3,350	3,250	350	100	50	7,100
E-6	1,300	4,450	900	350	300	7,300
E-7	350	1,750	1,000	300	300	3,700
E-8	100	50	50	^b	^a	200
E-9	^b	100	200	250	50	600
Total	7,950	11,150	2,900	1,400	750	24,150

^aNo one in the survey sample at this paygrade had a child of this age, therefore, the number in the Navy could not be estimated.

^bThere were less than 26 children in this cell.

Table C-6

**Estimated Number of Children in Families with a Civilian Spouse by
Age of Children and Paygrade of Parents**

Paygrade	0-5	6-12	13-15	16-18	19+	Total
E-2	3,900	350	^a	^a	^a	4,250
E-3	8,700	850	400	^a	^a	9,950
E-4	28,050	6,650	400	350	350	35,800
E-5	53,850	23,950	3,100	700	^a	81,600
E-6	39,650	38,800	9,300	7,050	850	95,650
E-7	13,650	28,100	5,850	4,950	950	53,500
E-8	2,800	5,750	2,600	2,300	400	13,850
E-9	800	2,650	2,300	2,450	750	8,950
Total	151,400	107,100	23,950	17,800	3,300	303,550

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-7

**Estimated Number of Children in Families with a Civilian Spouse
Employed Full-Time by Age of Children and Paygrade of Parents**

Paygrade	0-5	6-12	13 -15	16-18	19+	Total
E-2	850	50	a	a	a	900
E-3	1,300	400	400	a	a	2,100
E-4	8,400	2,800	400	a	350	11,950
E-5	11,900	6,650	1,050	700	a	20,300
E-6	9,300	13,500	3,700	2,500	550	29,550
E-7	4,800	10,700	2,900	2,100	550	21,050
E-8	850	2,350	1,200	1,000	100	5,500
E-9	300	1,350	1,400	1,650	400	5,100
Total	37,700	37,800	11,050	7,950	1,950	96,450

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-8

**Estimated Number of Children in Families with a Civilian Spouse
Employed Part-time by Age of Children and Paygrade of Parents**

Paygrade	0 -5	6 -12	13-15	16-18	19+	Total
E-2	1,400	300	a	a	a	1,700
E-3	850	a	a	a	a	850
E-4	4,050	700	a	a	a	4,750
E-5	12,150	4,850	350	a	a	17,350
E-6	8,000	10,250	3,100	3,150	250	24,750
E-7	2,250	8,350	2,000	650	150	13,400
E-8	500	1,400	650	650	150	3,350
E-9	150	600	400	400	150	1,700
Total	29,350	26,450	6,500	4,850	700	67,850

^aNo one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-9

**Estimated Number of Children Age 0 to 5 by
Marital Status and Paygrade of Parents**

Paygrade	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home	Total
E-2	200	100	850	1,400	1,650	4,200
E-3	1,200	200	1,300	850	6,550	10,100
E-4	1,450	2,100	8,400	4,050	15,600	31,600
E-5	3,350	2,400	11,900	12,150	29,800	59,600
E-6	1,300	1,500	9,300	8,000	22,350	42,450
E-7	350	250	4,800	2,250	6,600	14,250
E-8	100	50	850	500	1,450	2,950
E-9	^a	^a	300	150	350	800
Total	7,950	6,600	37,700	29,350	84,350	165,950

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within paygrade and dividing by 2. This yields a number that is probably an underestimate.

^aThere were less than 26 children in this cell.

Table C-10

**Estimated Number of Children Ages 3 to 4 and 3 to 5 by
Marital Status and Paygrade of Parents**

Paygrade	Spouse Works Part-time		Spouse at Home	
	3-4	3-5	3-4	3-5
E-2	350	350	350	350
E-3	450	450	1,550	2,000
E-4	1,150	1,150	2,800	4,850
E-5	4,750	5,500	10,950	13,750
E-6	3,150	4,000	6,150	10,600
E-7	800	1,450	2,450	4,200
E-8	200	250	550	850
E-9	50	100	150	200
Total	10,900	13,250	24,950	36,800

Table C-11

**Estimated Number of Children Who Live in Navy Housing by
Age of Children and Paygrade of Parents**

Paygrade	0-5	6-12	13-15	16-18	19+	Total
E-2	800	700	a	a	a	1,500
E-3	2,250	150	a	a	a	2,400
E-4	8,700	3,050	150	50	50	12,000
E-5	26,850	12,350	1,000	350	*	40,550
E-6	14,150	15,700	3,700	3,400	850	37,800
E-7	2,550	11,450	3,400	1,550	150	19,100
E-8	700	1,400	750	500	50	3,400
E-9	100	850	550	350	50	1,900
Total	56,100	45,650	9,550	6,200	1,150	118,650

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within paygrade and dividing by 2. This yields a number that is probably an underestimate.

*No one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-12

**Estimated Number of Children Who Live in Civilian Housing by
Age of Children and Paygrade of Parents**

Paygrade	0-5	6-12	13-15	16-18	19+	Total
E-2	3,400	400	a	a	a	3,800
E-3	7,850	850	400	a	a	9,100
E-4	22,900	4,350	850	700	350	29,150
E-5	32,750	15,200	2,450	500	50	50,950
E-6	28,300	28,850	6,600	4,050	300	68,100
E-7	11,700	18,600	3,550	3,700	1,100	38,650
E-8	2,250	4,450	1,900	1,800	350	10,750
E-9	700	1,900	1,950	2,350	750	7,650
Total	109,850	74,600	17,700	13,100	2,900	218,150

Note. The estimated number of children in dual military families was determined by summing the numbers for men and women within paygrade and dividing by 2. This yields a number that is probably an underestimate.

*No one in the survey sample at this paygrade had a child of this age; therefore, the number in the Navy could not be estimated.

Table C-13**Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	32,958	1,424	22	2	34,406
E-2	38,378	2,233	42	2	40,655
E-3	60,554	6,799	255	12	67,620
E-4	71,997	23,044	1,332	51	96,424
E-5	33,951	61,376	7,528	461	103,316
E-6	1,452	57,242	24,757	1,414	84,865
E-7	--	14,659	19,029	1,242	34,930
E-8	--	1,394	8,407	938	10,739
E-9	--	52	3,559	1,447	5,058
Total	239,290	168,223	64,931	5,569	478,013

Note. 4,356 male enlisted records did not have information on marital status. Therefore, the entries in tables D2 and D3 do not always total to the corresponding entry in this table.

^aFrom March 1991 Enlisted Master Record Extract.

Table C-14

**Single Enlisted Men:
Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	27,384	889	12	1	28,286
E-2	32,417	1,441	24	1	33,883
E-3	46,841	3,900	127	6	50,874
E-4	48,243	10,123	455	20	58,841
E-5	16,486	18,001	1,997	104	36,588
E-6	457	10,704	4,158	218	15,537
E-7	--	1,917	2,307	146	4,370
E-8	--	134	835	99	1,068
E-9	--	2	315	116	433
Total	171,828	47,111	10,230	711	229,880

^aFrom March 1991 Enlisted Master Record Extract.

Table C-15

**Married Enlisted Men:
Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	2,828	354	9	1	3,192
E-2	5,585	760	18	1	6,364
E-3	13,095	2,798	124	5	16,022
E-4	23,718	12,890	865	28	37,501
E-5	17,455	43,321	5,493	347	66,616
E-6	995	46,521	20,570	1,184	69,270
E-7	--	12,739	16,703	1,089	30,531
E-8	--	1,258	7,564	836	9,658
E-9	--	50	3,242	1,31	4,623
Total	63,676	120,691	54,588	4,822	243,777

^aFrom March 1991 Enlisted Master Record Extract.

Table C-16

**Enlisted Women:
Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	3,249	147	1	--	3,397
E-2	4,684	365	6	--	5,055
E-3	8,833	1,658	75	--	10,566
E-4	7,768	4,427	412	11	12,618
E-5	2,483	9,246	1,393	90	13,212
E-6	14	4,747	2,216	177	7,154
E-7	--	808	991	67	1,866
E-8	--	45	286	15	346
E-9	--	2	50	9	61
Total	27,031	21,445	5,430	369	54,275

Note. 484 female enlisted records did not have information on marital status. Therefore, the entries in tables D2 and D3 do not always total to the corresponding entry in this table.

^aFrom March 1991 Enlisted Master Record Extract.

Table C-17

**Single Enlisted Women:
Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	2,737	90	1	--	2,828
E-2	3,874	250	5	--	4,129
E-3	6,462	1,072	43	--	7,577
E-4	4,737	2,441	214	8	7,400
E-5	1,288	4,197	711	55	6,251
E-6	5	1,962	1,021	88	3,076
E-7	--	296	448	36	780
E-8	--	22	129	13	164
E-9	--	1	28	4	33
Total	19,103	10,331	2,600	204	32,238

^aFrom March 1991 Enlisted Master Record Extract.

Table C-18

**Married Enlisted Women:
Number of Active Duty Personnel^a by Paygrade and Age Group**

Paygrade	Years 25 or Younger	Years 26 to 35	Years 36 to 45	Years 46 or Older	Total
E-1	230	41	--	--	271
E-2	757	113	1	--	871
E-3	2,323	565	32	--	2,920
E-4	3,026	1,975	193	3	5,197
E-5	1,195	5,032	674	33	6,934
E-6	9	2,779	1,192	88	4,068
E-7	--	511	543	28	1,082
E-8	--	23	157	2	182
E-9	--	1	22	5	28
Total	7,540	11,040	2,814	159	21,553

^aFrom March 1991 Enlisted Master Record Extract.

Table C-19

**Percentage of Enlisted Personnel Reporting Who Usually Takes Care of
Their Children by Marital Status of Parent for Children Age 0 to 5**

Caretaker	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home
Military child care center	24	27	15	13	7
Base-operated family home care program	15	14	8	4	3
Private licensed facility	31	27	33	18	7
24-hour facility	<1	2	1	<1	<1
At-home employee	9	9	7	3	3
Relative	18	10	17	23	12
Friend	45	37	34	49	32
Older sibling	<1	1	3	3	3
Spouse	5	24	16	42	66
Other	6	8	7	5	3
No arrangements/child care problem	8	5	4	10	12

Notes.

1. These data are from NPS, not the 1990 SNW/NM. *N* = 1,176.
- 2.) Columns and rows do not add to 100 because survey respondents could choose more than one option.

Table C-20

**Percentage of Enlisted Personnel Reporting Who Usually Takes Care of
Their Children by Marital Status of Parent for Children Age 6 to 12**

Caretaker	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home
Military child care center	16	24	14	9	7
Base-operated family home care program	11	9	7	1	4
Private licensed facility	22	28	28	17	10
24-hour facility	<1	<1	<1	1	<1
At-home employee	6	9	6	5	2
Relative	26	18	21	22	14
Friend	45	47	41	57	37
Older sibling	5	8	9	12	8
Spouse	6	31	18	45	63
Other	12	10	8	7	5
No arrangements/child care problem	15	11	2	7	10

Notes.

1. These data are from NPS, not the 1990 SNW/NM. *N* = 556.
- 2.) Columns and rows do not add to 100 because survey respondents could choose more than one option.

Table C-21

**Percentage of Enlisted Personnel Requiring Full-time Care for a Preschool Child
Reporting Why They Do Not Use Military Child Development Centers or
Family Home Care, by Marital Status of Parent**

Reason for not using military child care	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home	Total
Service unavailable/not aware of service	11	10	9	16	15	13
Waiting list	43	44	33	29	33	34
Inconvenient location	7	7	18	21	15	16
Substandard care	9	15	9	2	6	8
Restricted hours	16	10	5	6	2	5
Too expensive	5	6	11	17	18	13
Other	9	8	15	9	11	11

Notes.

1. These data are from NPS, not the 1990 SNW/NM. $N = 761$.
2. Only one response could be chosen; therefore, column percentages add to 100.
3. A single question assessed reasons for not using both military child development centers and family home care. Child development centers were not assessed separately.

Table C-22

**Percentage of Enlisted Personnel Who Require Before an
After School Care by Marital Status of Parent**

Type of care	Single Parent	Dual Military	Spouse Works Full-time	Spouse Works Part-time	Spouse at Home
Before school	24	32	22	12	10
After school	40	36	40	32	27

Notes.

1. These data are from NPS, not the 1990 SNW/NM. $N = 1,383$.
2. Respondents could choose more than one type of care.
3. Reasons for not needing care were not assessed.

DISTRIBUTION LIST

Child Development Services Branch of the Bureau of Naval Personnel (PERS-659)
Defense Technical Information Center (DTIC)